WEST VALLEY DEMONSTRATION PROJECT INTEGRATED SAFETY MANAGEMENT SYSTEM VERIFICATION REPORT

Department of Energy Ohio Field Office

November 1998

I, by signature here, acknowledge that I concur with the TEAM LEADER and SENIOR ADVISOR in the issues and conclusions of this report of the Integrated Safety Management System Verification in my assigned functional area.

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EXECUTIVE SUMMARY

Department of Energy (DOE) Policy (P) 450.4, Safety Management System Policy, commits to institutionalizing an Integrated Safety Management System (ISMS) throughout the DOE complex. The DOE Acquisition Regulations (DEAR, 48 CFR 970) require contractors to manage and perform work in accordance with a documented ISMS.

The Manager, Ohio Field Office (OH), initiated this combined Phase I and Phase II ISMS Verification Review to confirm the West Valley Demonstration Project (WVDP) had successfully submitted a description of their ISMS (Phase I) and had implemented ISMS within the site facilities and processes (Phase II). This combined review was directed by the Manager, OH, based upon the progress WVDP had made in the implementation of an ISMS.

This report documents the results of the review conducted to verify: 1) that the WVDP Integrated Safety Management System description, enabling documents and processes conform to the guidance provided by the Manager, OH; 2) that corporate policy is implemented by line managers; 3) that WVDP has provided tailored direction to the facility management; and 4) the Manager, OH, has documented processes that integrate field office safety activities and oversight with those of the WVDP. The general conduct of the review was consistent with the direction provided by the Under Secretary's Safety Management System Review and Approval Protocol.

The purpose of this review was to provide the Manager, OH, with a recommendation on the adequacy of the ISMS description of WVDP, based upon compliance with the requirements of 49 CFR 970.5204 (.2 and .78); and, to provide an evaluation of the extent and maturity of ISMS implementation within WVDP. Further, this review was intended to provide the Ohio Field Office with experience and lessons learned for application in future OH project office ISMS Verifications.

The verification was conducted as one visit from November 5 to November 13, 1998 and included workdays on the weekend and Veteran's day. This ambitious schedule could not have been completed without the outstanding support provided by contractor and local DOE personnel.

The Team recommends approval of the WVDP Integrated Safety Management System Description. The Team considers the ISMS mature and fully implemented at WVDP. No deficiencies were noted although the Team recommends that one previously noted area of concern regarding procedural compliance receive continued management attention. Areas for improvement and noteworthy practices are also discussed in the following paragraphs.

DEFICIENCIES

No deficiencies were noted, although an area of concern from two previous inspections deserves continued senior management attention, relative to ISMS implementation at the WVDP. More specifically, both the U.S. Nuclear Regulatory Commission (NRC) Monitoring visit of June 29 through July 2, 1998 (USNRC Region I Inspection Report 98-02) and OH/WVDP Operations Assessment Report A98-05OE noted significant weaknesses in WVNS procedural compliance. WVNS has developed and initiated an adequate corrective action plan to improve procedural compliance and improve the quality of work instructions. The ISMSV Team recommends continued senior management attention to this area.

AREAS FOR IMPROVEMENT

Both OH/WVDP and WVNS should ensure that assessment procedures adequately address all areas discussed in DOE Policy P450.5, Line Environment, Safety and Health oversight. The WVNS independent assessment should conduct an independent audit of the self-assessment program as discussed in P450.5. (See CRADs DOE.1 and 3.4.7 for details)

Although WVNS has an adequate EMS in place, EMS requirements and deliverables need to be identified and the remaining finding against WV-980 should be resolved. (See CRAD 4.1 for details)

Provide additional training in hazard screening principles and techniques for work order originators and other individuals with hazard screen responsibilities. (See CRAD 4.4.1 for details)

NOTEWORTHY PRACTICES

WVNS practices and procedures for flowdown of ISM requirements to subcontractors is noteworthy. WV-19012(a), "General Safety, Health and Security Rules for On-site Services" and WV-19012(b), "Special Safety Health and Security Rules for On-Site Services", provide excellent processes for work flowdown. These processes provide a tailored approach that help the subcontractor achieve the correct level of ISM implementation for the service that is provided. The continued use and improvement of these processes is encouraged by the Team (CRAD 1.3).

The establishment and maintenance of "List B" Requirements and Standards is accomplished through a joint DOE/WVDP and WVNS effort established by the DOE Directives Manager. The process is well documented in WV-221 and provides an excellent method of keeping List B current and continually available to managers (CRAD 1.5)

The user friendliness of the Performance Analysis Data System provides significant enhancement to the WVDP continuous improvement process (CRAD 3.4.7)

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1.0 INTRODUCTION

The Department of Energy (DOE) committed to institutionalization of an Integrated Safety Management System (ISMS) throughout the DOE complex in DOE Safety Management System Policy(P 450.4). This commitment is incorporated into DOE Acquisition Regulations (DEAR, 48 CFR 970-2 and -78) and DOE site operations contracts requiring contractors to manage and perform work in accordance with documented ISMS processes.

At the West Valley Demonstration Project (WVDP) site, guidance and expectations for ISMS implementation were provided to West Valley Nuclear Services Company, Inc. (WVNS) by Ohio Field Office, West Valley Demonstration Project Office (OH/WVDP) letter of March 1997. ISMS was also incorporated into the WVNS operating contract DE-AC-81NE44139. This has resulted in the development of the WVDP Safety Management System (SMS) Description, WVDP-310, which was completed in May 1998, and site implementation.

Subsequently, WVNS formed an ISMS self-assessment team to verify the implementation status and completed the review in May 1998. OH/WVDP also formed a self-assessment team and completed WVNS and DOE OH/WVDP reviews of the SMS program and implementation status. Each of these teams included independent membership. The OH/WVDP team also included an Ohio Field Office observer. The results of these assessments indicated the core values and guiding principles of DOE P 450.4 were being implemented at WVDP.

The West Valley (WVDP) Report of Integrated Safety Management Systems Self Assessment (June 1998) was forwarded to the Ohio Field Office on September 17, 1998, with a request for an Ohio Field Office ISMS Verification. The report contained noteworthy issues and practices as well as recommendations for improvement. The recommendations included improvement of subcontractor ISMS DEAR clarification, procedural clarification of hazard analysis requirements for work, and improvement of mechanisms to provide consistent feedback.

This ISMS Verification, Phase I and Phase II, was conducted to assess the adequacy of the ISMS description in fulfilling the requirements of the DEAR and the DOE Policy, and to determine the degree of its implementation at the WVDP. It was conducted in support of the Manager, Ohio Field Office, and in accordance with the Integrated Safety Management System Verification (ISMSV) Process, Team Leader's Handbook, DOE-HDBK-XXX-98, February 1998. Mr. Jack Zimmerman was appointed Team Leader in accordance with the Handbook by the Manager, Ohio Field Office, by Letter of Appointment dated October 16, 1998 (Appendix A).

2.0 PURPOSE

The purpose of this ISMS Verification was to review the adequacy of the WVDP ISMS Description, relative to the requirements of DEAR, CFR and DOE Policy 450.4, and to provide the Manager, Ohio Field Office, with a recommendation of ISMS approval, or identification of areas which must be improved before approval. This recommendation shall be based on the ability of the WVDP ISMS Description (WVDP-310) to comply with the requirements of 49 CFR 970.5204 (.2 and .78) and DOE P 450.4, as well as the level of implementation.

The review was intended to verify that the DOE Ohio Field Office and West Valley Demonstration Project Office responsibilities for ISMS are assigned and being properly implemented.

This review was also intended to provide the Ohio Field Office with the experience and lessons learned necessary to perform improved future Ohio Project Office ISMS Verifications.

3.0 SCOPE

The scope of the review was to verify that the WVDP had met the letter and intent of Department of Energy Policy (P) 450.4, which states:

The Department and Contractors must systematically integrate safety into management and work practices at all levels so that missions are accomplished while protecting the public, the worker, and the environment. This is to be accomplished through effective integration of safety management into all facets of work planning and execution. In other words, the overall management of safety functions and activities becomes an integral part of mission accomplishment.

This was accomplished by verifying that the WVDP ISMS Description (WVDP-310) met the requirements of 49 CFR 970.5204.2 and .78 (Phase I) and that implementation had occurred throughout the site (Phase II). Phase I consisted of a review of the adequacy of the WVDP SMS Description to fulfill the core functions and guiding principles of DOE P 450.4. Phase II was a confirmation of the satisfactory implementation of ISMS. The verification was conducted to demonstrate that the contractor's ISMS had been implemented using the legal and contractual requirements for doing work safely.

WVDP prepared an Integrated Safety Management System Description, implemented the process, and requested verification by the Ohio Field Office. The contractual and business management processes were examined to establish the breadth and depth of ISMS implementation. The WVDP documentation hierarchy and the WVDP ISMS Description (WVDP-310) were reviewed for adequacy to implement ISMS. The review considered the ability of the WVDP ISMS to achieve the core functions and guiding principles of DOE P 450.4, and whether there was a systematic integration of ES&H activities into all organizational management and work practices.

Although all facilities were open for review, a representative set of facilities and programs were selected to obtain a representative sampling. The selected facilities represented two Nuclear Facilities (Hazard Category 2), one Nuclear Facility (Hazard Category 3), two Radiological Facilities, and one Industrial Facility. The Team Leader also directed the attention of the team toward any or all facilities as deemed necessary to verify the adequacy of site wide ISMS implementation.

In addition to the contractor's ISMS Description and implementation, the review verified that the DOE Ohio Field Office and West Valley Demonstration Project Office responsibilities for ISMS have been assigned and are being properly implemented, as defined in the Ohio Field Office Functions, Responsibilities, and Authorities Manual, OH-1220-98, August 8, 1998.

The review of DOE ISMS aspects included: preparation and approval of mission assignments and program guidance, allocation of resources to support the mission and safety requirements, and management guidance to the staff regarding the safety management system. The Team reviewed DOE's participation in budget and program management by executive, program and project staff, the Authorization Agreement to implement specific programs and processes as part of the authorization basis, and their ability to direct and monitor the terms and conditions of the Authorization Agreement.

The DOE review evaluated technical qualifications and experience of key members of the Ohio Field Office and West Valley Demonstration Project Office staffs as well as the program office staff to oversee the continuous application of ISMS and monitor its trends. The review of these staffs did not duplicate prior reviews or assessments, but it did verify the adequacy of the resultant actions to resolve issues, implement recommendations, and maintain continuous improvement programs.

4.0 SCOPE CONSIDERATIONS

Many aspects of the WVDP ISMS have been the subject of previous safety implementation reviews. These reviews were repeated only to the extent necessary to verify the review adequacy, correct identification of deficiencies, adequate deficiency resolution, and proper execution of continuous improvement programs. Several WVDP safety programs were identified as satisfactory by previous independent reviews. These programs were included within this ISMS review only to the degree necessary to ensure ISMS has been expanded into all facilities at the WVDP. The following reviews were considered during the conduct of the ISMS review and in establishing the scope:

- An ISMS self assessment conducted by a WVNS (Contractor) team with independent membership in May 1998. Following this activity, OH/WVDP (DOE) conducted an additional ISMS self assessment, expanded to include DOE ISMS activities, with a team that included an independent DOE SRS member and OH observer in June 1998. The WVDP Report of Integrated Safety Management Systems, June 1998, Self Assessment, documents the implementation status of the ISMS principles and functions at the WVDP.

The scope of this ISMS review took into account the above ISMS self-assessments, and placed emphasis on the adequacy of the self-assessment, actions taken to resolve issues, implementation of recommendations, and continuous improvement programs to maintain future effectiveness.

 A Technical Safety Appraisal of the WVDP Safety Program Implementation (Assessment A97-037E) was conducted by DOE WVDP in June 1997. The appraisal determined that each of the programs or disciplines examined were being effectively implemented, although opportunities for improvement were noted.

The scope of this ISMS review took into account the above assessment, placing emphasis on improvements recommended as well as continuous improvement and self-assessment programs since June 1997.

 An Independent Technical Review of the WVDP was conducted January 13-17, 1997 by the Office of Oversight, ES & H. This review followed the independent WVDP and WVNS Independent DOE Investigation and Analysis of Unusual Occurrence, OH-WV-WVNS-1996-VFS-006.

The scope of this ISMS review was limited to evaluating identified concerns and opportunities for improvement from the above review, as well as continuous improvement and self-assessment programs since January 1997.

5.0 VERIFICATION APPROACH

The review was performed using the process flow, functional area model provided in DOE G 450.4. A set of Criteria Review and Approach Documents (CRAD) was developed at two organizational levels for review; Institutional and Facility/Activity Level. Each set was organized parallel to the approach provided in DOE G 450.4, Chapter 3, combining the ISMS Core Functions with the appropriate Guiding Principle. The CRADs were developed to verify the ISMS integration by examination of selected subjects throughout the site. The seven CRADs listed below were established as Standard CRADs for this verification. These CRADs were used to examine the application of an ISMS at the WVDP are used for each organizational level or subject area.

- Core Function 1, Define the Scope of Work; and, Guiding Principle 4, Balanced Priorities
- Core Function 2 Analyze the Hazards
- Core Function 3, Develop/Implement Hazard Controls; Guiding Principle 5, Identification of Safety Standards and Requirements; and, Guiding Principle 6, Hazard Controls Tailored to Work Being Performed
- Core Function 4, Perform Work; and, Guiding Principle 7, Operations Authorization
- Core Function 5, Feedback and Improvement
- Guiding Principle 1, Line Management Responsibility for Safety; and, Guiding Principle 2, Clear Roles and Responsibilities
- Guiding Principle 3, Competence Commensurate with Responsibility

Institutional review was conducted using CRADs as lines of inquiry. The CRAD criteria examined the WVDP ISMS processes and systems. Individual CRADs provided the stated objectives for the applicable systems and processes, the criteria for determining if the systems and processes met the objectives, the appropriate WVDP documents to be reviewed, staff to be interviewed in carrying out the review, and observations to be made, when appropriate.

5.1 Facilities

This ISMS review concentrated on six facilities, although all facilities were open to the team and were examined as time allowed or as inquiries directed. To develop the broadest and most representative view of the WVDP ISMS system, high, intermediate and low hazard facilities were preselected by the Team Leader. The ISMS implementation within each of these facilities was examined in depth and compared against the CRADs, guiding principles, and values. The six facilities were: Main Plant (Facility #2), Vitrification Facility #4, Chemical Process Cell (Facility #8), Low Level Waste Treatment System - LLW2 (Facility #13), Waste Reduction & Packaging Area (Facility #19), and the Vit Fabrication Facility #21.

5.2 Institutional Level Verification

The institutional level review focused on the Ohio Field Office, WVDP, and WVNS structures to develop, implement, and continuously improve the application of ISMS core functions and guiding principles. The general structure of the ISMS, relative to the criteria and expectations outlined in DOE 450.4 policy and guidance, was evaluated.

The Ohio Field Office and WVDP level review examined the vertical and lateral integration of ISMS within policies, procedures, contracts, and other documents in accordance with DOE 450.4 policy and guidance, DEAR 970.5204.2 and 970.5204.78, and FRAM DOE M 411.1. The DOE's ability to monitor the initial and continuing implementation of site and contractor ISMS was also reviewed.

The team interviewed selected personnel using established lines of inquiry to provide a thorough understanding of the systems established, implemented, and maintained within the Safety Management System Description. Such an integrated procedure framework was designed to provide to the WVDP and WVNS staffs: policies, standards, procedures and guidelines that are current, accurate, and relevant to the work being performed. The team examined ISMS implementation via these documents, as directed by the appropriate CRADs.

The WVNS institutional management structure is organized by facility operations and functional responsibilities. Three senior managers are responsible for operations and construction activities (Vitrification Operations, Site Operations, and Project Administration). The Manager, Safety Analysis and Integration, is responsible for the Safety Management System and reports to the Manager of Environment, Safety, QA, and Laboratory Operations. These management organizations were reviewed by the Verification Team to establish an overview of the management system used to implement and maintain ISMS. Management position descriptions were examined specifically for Vitrification Operations, Site Operations, Project Administration, Safety Analysis and Integration, and Environment, Safety, QA, and Laboratory Operations. Other management descriptions were pursued as needed to complete an inquiry.

The Authorization Agreement established for WVDP was explored for adequacy of coverage and linkage to the overall principles and function of ISMS.

5.3 Facility and Activity Level Verification

The facility level of review followed the function of the facility organizations. Linkage of the Authorization Agreement into facilities operational documents was explored for incorporation of the intent of the ISMS guiding principles and core functions. Also, the relationship of line and support organizations to maintain the authorization envelope was verified for the tailored ISMS as prescribed by guidance DOE P 450.4. The Main Plant and Vitrification Facility, Category II facilities, were expected to demonstrate a higher level of control and accountability commensurate with that designation.

The trail of requirement and implementation from top levels of facility management to the basic working levels within the facilities was followed. The ties and connections between the facility's teams and support organizations were also examined for ISMS linkage. All aspects of work planning and control, authorization agreements, and configuration management were explored to confirm their existence between these functional lines.

The activity level review consisted of following the operational line organizations that accomplish the organizational missions and objectives. The team reviewed the activity by examining the management system and tracking individual projects and work tasks through their life cycle; mapping performance against the established criteria in the CRADs.

Projects and work packages for this review were selected from a listing of new, ongoing and completed projects. The listing was supplied by the contractor and included a categorization of the projects for general size, complexity, and hazard potential. Selection of some unfinished projects and work packages in various stages of the management life cycle allowed reviewers to ascertain the degree to which ISMS functions and values have been implemented. Facility issues or observations by the Verification Team were included in the ISMSV Report along with recommendations.

The various tools and programs used to manage and control projects and work planning were reviewed. Emphasis was placed on exploring the maturity of the governing ISMS processes controlling project life cycle. Work control and authorization mechanisms were explored. Some processes were examined by more than one subteam due to their crosscutting nature.

Interviews were held with key line management as well as the individual project managers, work supervisors, and their staffs as required to track against the project/work management life cycle. Roles and responsibilities were examined as well as staff qualification and competence.

5.4 Subject Area Verification

Two teams (operations and safety) in specified functional areas were chosen to provide vertical and horizontal slices through the ISM levels described above. Some of these areas represented topics of current interest while others cover basic elements of operations, safety, and work at the task level. The specified areas were: Operations, Maintenance, Construction, Self-assessment/ Lessons Learned, Environment, Radiation Protection, IH/Safety, and Worker Involvement. Subject matter experts were assigned to review each functional area.

The scope of this effort was to examine the flowdown and interrelationship of organizations to implement the ISMS processes and mechanisms as viewed from the perspective of each subject area. Subject matter experts were expected to develop a review methodology consistent with the CRADs; thereby, maintaining the focus on exploring process and function rather than compliance. Results developed within the functional areas was also incorporated into the appropriate subject sub-teams.

5.5 Process

The verification was conducted to ascertain adherence to the core functions and guiding principles of the ISMS process and the field implementation of the system utilizing the criteria set forth by the CRADs. Four subteam leaders were responsible for conducting the investigations, ensuring that assigned CRADs were fully evaluated, and preparing verification documentation.

Contractor ISMS level of implementation was measured relative to the legal and contractual requirements established to accomplish work safely. <u>All work</u> should be performed within the framework of these requirements. The assessment process produced a report that identifies specific strengths and weaknesses. Results are prioritized as: 1) deficiencies, 2) areas for improvement, or 3) noteworthy practices.

5.6 Evaluation Criteria

Each CRAD and associated review criteria evaluated: 1) the adequacy of the ISMS Description to fulfill the application of the ISMS five core functions and guiding principles through application of the documents described within (Phase I) and 2) the adequacy of the implementation of the prescribed processes throughout the WVDP (Phase II). The following evaluation categories were established for a standardized Team evaluation. Each Team member designated each CRAD review criteria into one of the following evaluation categories.

DEFICIENCIES

Phase I	The SMS Description does not include a ISMS process in the	do
Phase II	A documented process or procedure described within the SMS	De

AREAS FOR IMPROVEMENT

Phase I	The SMS Description includes the ISMS processes but the documented	pro
Phase II	A documented process or procedure described within the SMS	De

NOTEWORTHY PRACTICES

Noteworthy practices were noted to describe the successful application of ISMS principles to acknowledge WVDP's success and transfer positive lessons learned throughout the DOE complex.

6.0 ADMINISTRATION

Jack Zimmerman, Associate Director, ES & H, MEMP, was the Team Leader for the West Valley ISMS Verification Review. The Manager, Ohio Field Office, appointed Mr. Zimmerman by Letter of Appointment dated October 16, 1998 (Appendix A).

6.1 Team Organization

Four Sub-teams at two organizational ISM levels and in two functional areas (Figure 1) conducted this review. The organizational subteams included Institutional and Facility & Activity/Task. The organizational team members were management and ISMS process experts. Subject subteams included the Operations and Safety Subteams. These Team members were Subject matter experts who explored vertical and horizontal slices through the WVDP. Interviews, document reviews, facility walk-throughs and observation of ongoing work were used to gather information. Significant effort has already been placed on ensuring operations of the WVDP are managed by a direct, performance based contract. Therefore, substantial benefit to the review was gained by exploring the performance measures and indicators, both at the contract and organizational levels.

The team explored the WVDP ISMS self assessment, independent oversight and external reviews. All facets of ISMS linkages to the various operations and support organizations was evaluated. Emphasis was placed on demonstration of safety implementation within business practices and how these practices are applied in the field. Deficiencies identify a systematic breakdowns of ISMS. This verification was intended to be a review of the adequacy of the WVDP SMS Description and it's implementation, and not a detailed determination of programmatic compliance.

6.2 Team Composition

Team members were selected based upon the criteria established by the February 21, 1997, Memorandum from the Under Secretary of Energy. This criteria include:

- Established expertise in one or more functional areas
- Appraisal experience
 - * Familiarity with the site/facility mission and processes
 - Knowledge, understanding, and training on Integrated Safety Management

The ISMSV team was organized into subteams organized into two organizational ISM levels (Institutional and Facility & Activity/Task) and in two functional areas, Operations and Safety (Figure 1).

Subject matter experts were assigned to cover functional areas including Operations, Maintenance, Construction, Self-assessment/ Lessons Learned, Environment, Radiation Protection, IH/Safety, and Worker Involvement. Team member's qualifications were validated and documented by the Team Leader in accordance with

the Under Secretary's directions. Team roster and qualification summaries are found in Appendix B.

6.3 Team Preparation

Proper preparation of Team members was critical to perform this verification, prepare a credible report, and providing a recommendation to the Manager, Ohio Field Office, of the WVDP SMS Description and its implementation status. Therefore, members were required to prepare for their individual assignments by completion of the following required reading and/or activities. The specific required reading list for each individual team member is listed on individual qualification summaries (Appendix B).

Team reading requirements:

- West Valley Demonstration Project ISMS Verification Plan
- Safety Management System Policy, DOE P 450.4
- Ohio Safety Management Policy, OH-40.S003, Revision 1-B
- Integrated Safety Management System Guide, DOE G 450.4
- WVDP SMS Program Description, WVDP-310
- Ohio Field Office West Valley Demonstration Project (OH/WVDP) Integrated Safety Managem

Team members were also required to complete Executive Level ISMS Training conducted by a qualified trainer; this training was performed the day of arrival at the WVDP.

Team members were also required to complete the level of training required to function appropriately on site; this site-specific training was also provided at the WVDP upon arrival.

6.4 Site Coordination and Support

WVDP and contractor staff were available to assist the team and provide support on an as needed basis before and during the visit. The Office of Operations and Safety of WVDP hosted the team and provided the primary support. The principle point-of-contact was, T. J. Jackson, Team Leader, Safety/Health & QA.

6.5 Schedule

The review was conducted between November 4 and 13, 1998, inclusively. Activities for the first day included team introductions, ISMSV training, required site training, and site SMS Description and implementation presentations. The daily schedule included a brief morning kick-off with team members. Close-outs were held at 4:00 p.m. each day, with an emphasis placed on sharing cross-cutting issues and exploring potential avenues for the next day's review. The close-outs included participation by WVNS and DOE-WVDP personnel. A final close-out briefing was conducted with WVNS and DOE-WVDP senior management.

7.0 CONCLUSION

The Team recommends approval of the WVDP Integrated Safety Management System Description. The Team considers the ISMS mature and fully implemented at WVDP. No deficiencies were noted although the Team recommends that one previously noted area of concern regarding procedural compliance receive continued management attention. Several areas for improvement were identified, as were noteworthy practices. These noteworthy practices will be shared throughout the DOE complex.

8.0 LIST OF DEFICIENCIES

No deficiencies were noted, although an area of concern from two previous inspections deserves continued senior management attention, relative to ISMS implementation at the WVDP. More specifically, both the U.S. Nuclear Regulatory Commission (NRC) Monitoring visit of June 29 through July 2, 1998 (USNRC Region I Inspection Report 98-02) and OH/WVDP Operations Assessment Report A98-05OE noted significant weaknesses in WVNS procedural compliance. WVNS has developed and initiated an adequate corrective action plan to improve procedural compliance and improve the quality of work instructions. The ISMSV Team recommends continued senior management attention to this area.

9.0 LIST OF AREAS FOR IMPROVEMENT

- 1. Re-evaluate existing assessment procedures to ensure that all of the requirements of DOE Policy 450.5, Line Environment, Safety and Health Oversight are fully complied with. Add the policy number as a reference where established assessment procedures are intended to satisfy policy requirements. Consider revising the assessment schedule to reflect specific milestones for assessment of the contractor's self-assessment program. (See CRAD DOE.1)
- 2. The performance of an independent audit of the site wide self-assessment program is recommended to fulfill the obligations of DOE P 450.5. (See CRAD 3.4.7)
- 3. Although the DOE-WV Project Director is assigned the responsibility for ensuring that the project performs consistent with environmental laws, regulations and requirements, there is no flow down of this responsibility to any other member of the DOE-WVDP staff. It is noted that conducting activities in an environmentally sound manner is listed in some of the organizational mission statements, but this does not equate to an assignment of responsibility. (See CRAD 4.1)
- 4. Although WVNS has an adequate EMS in-place, prompt action should be taken to clarify EMS requirements and deliverables, and to close out the outstanding finding against WV-980. (See CRAD 4.1)
- 5. Ensure that RCT's understand clear roles and responsibilities for line management versus support personnel and are provided additional opportunities for exchange of information between RCT's. (See CRAD 4.2.2)
- 6. Additional training in hazard screening principles and techniques for work order originators and other individuals with hazard screen responsibilities. Also, establishment of performance standards commensurate with responsibilities. The performance standards are to verify the ability of the personnel to conduct effective hazards. Effective mentoring could be used instead of additional training with the daily work package review meeting as a vehicle. (See CRAD 1.4.1)

10.0 LIST OF NOTEWORTHY PRACTICES

- 1. West Valley Nuclear Services practice and procedures for flowdown of ISM requirements to subcontractors is noteworthy. WV-19012(a), "General Safety, Health and Security Rules for On-Site Services", and WV-19012(b), "Special Safety, Health and Security Rules for On-Site Services" provide excellent processed for work flowdown. These processed provide a tailored approach that help the subcontractor achieve the correct level of ISM for the service that is provided. The continued use and improvement of these processed is encouraged by the verification team. (See CRAD 1.3)
- 2. The establishment and maintenance of "List B" Requirements & Standards is accomplished through a joint DOE/WVDP and WVNS effort established by the DOE Directives Manager and the WVNS Information Services Manager. The process is documented in WV-221, "Administration of DOE Directives, DOE Technical Standards, and Code of Federal Regulations. (See CRAD 1.5)
- The user friendliness of the Performance Analysis Data System provides significant input to the WVDP continuous improvement process. (See CRAD 3.4.7)

11.0 LESSONS LEARNED

- 1. Site tours and orientations for Team Members not familiar with the site were beneficial.
- 2. To improve team synergy and interactions, all team members, especially site personnel, need to be sequestered for the duration of the review.
- 3. The team needs to have a common word processing software.

REFERENCES

- Letter, W. G. Poulson, President, WVNS from R. B. Provencher, WVDP, Associate Director, Operations and Safety, of March 19, 1997, "Development of Plan of Implementation of Integrated Safety Management System at DOE West Valley Demonstration Project (DOE-WV)".
- 2. Contract Number DE-AC24-81NE44139, M199, and Attachment G (Current List of Directives Applicable to the WVNS Contract).
- 3. DOE Safety Management System Policy, DOE P 450.4.
- 4. DOE Safety Management System Guide, Volumes 1 and 2, DOE G 450.4-1.
- 5. DOE Safety Management Systems Verification (ISMSV) Process, Team Leaders Handbook, DOE-HDBK-XXX-98, February 1998.
- 6. Ohio Field Office Safety Management Policy (OH-40.S003).
- 7. Ohio Field Office Functions, Responsibilities, and Authorities Manual (FRAM), August 8, 1998.

Figure 1 WVDP ISMSV Team Roles and Responsibilities

Appendix ATeam Leader Letter of Appointment

Appendix BWVDP ISMSV Team Qualification Summary